

1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 9}{3} - \frac{7x - 6}{5} = \frac{-6x - 6}{7}$$

- A. $x \in [-6.7, -5.3]$
 - B. $x \in [-28.2, -25.3]$
 - C. $x \in [-3.2, -0.8]$
 - D. $x \in [-5.2, -2.7]$
 - E. There are no real solutions.
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2. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(-19x - 11) = -18(-2x - 5)$$

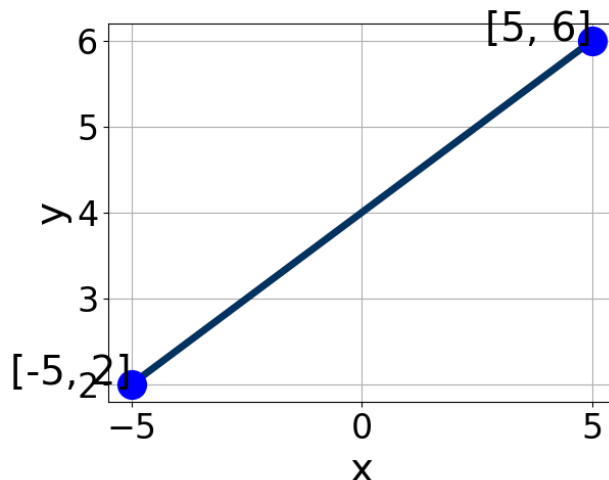
- A. $x \in [-1.21, -0.9]$
 - B. $x \in [-0.86, -0.65]$
 - C. $x \in [0.48, 2.61]$
 - D. $x \in [-0.31, 0.24]$
 - E. There are no real solutions.
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3. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(7, -4) \text{ and } (-11, -10)$$

- A. $m \in [-0.02, 1.47]$ $b \in [4.33, 9.33]$
- B. $m \in [-0.02, 1.47]$ $b \in [-9.33, -2.33]$
- C. $m \in [-0.79, 0.15]$ $b \in [-17.67, -12.67]$
- D. $m \in [-0.02, 1.47]$ $b \in [-2, 3]$
- E. $m \in [-0.02, 1.47]$ $b \in [-13, -9]$

4. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-0.54, 0.83]$, $B \in [0.4, 1.3]$, and $C \in [1, 5]$
B. $A \in [1.84, 2.92]$, $B \in [1.7, 6.9]$, and $C \in [16, 28]$
C. $A \in [1.84, 2.92]$, $B \in [-5.6, -4.3]$, and $C \in [-20, -14]$
D. $A \in [-0.54, 0.83]$, $B \in [-4.4, -0.7]$, and $C \in [-8, -2]$
E. $A \in [-2.65, -1.44]$, $B \in [1.7, 6.9]$, and $C \in [16, 28]$
5. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $7x + 9y = 9$ and passing through the point $(-7, -3)$.

- A. $m \in [1.23, 2.14]$ $b \in [5.2, 7.1]$
B. $m \in [1.23, 2.14]$ $b \in [3.3, 4.4]$
C. $m \in [1.23, 2.14]$ $b \in [-6.7, -2.7]$
D. $m \in [-1.31, -0.88]$ $b \in [-15, -11.4]$
E. $m \in [0.52, 0.95]$ $b \in [5.2, 7.1]$

6. Solve the equation below. Then, choose the interval that contains the solution.

$$-13(-16x - 3) = -2(-6x - 19)$$

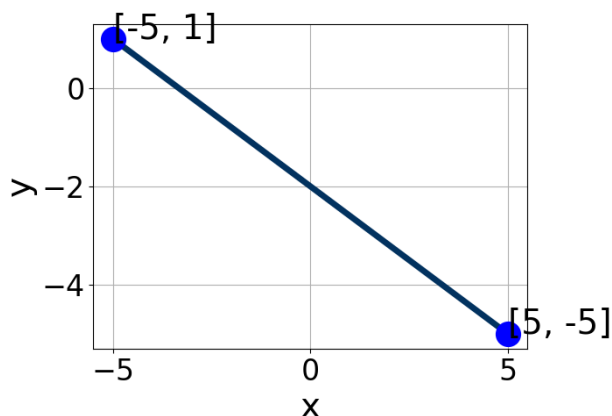
- A. $x \in [-0.01, 0.04]$
 - B. $x \in [-0.41, -0.38]$
 - C. $x \in [-0.35, -0.34]$
 - D. $x \in [0.39, 0.42]$
 - E. There are no real solutions.
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7. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $9x + 7y = 13$ and passing through the point $(-6, -6)$.

- A. $m \in [-1.36, -0.79]$ $b \in [7.71, 16.71]$
 - B. $m \in [-1.36, -0.79]$ $b \in [-14.71, -10.71]$
 - C. $m \in [-0.92, 0.06]$ $b \in [-14.71, -10.71]$
 - D. $m \in [1.21, 1.32]$ $b \in [1.71, 6.71]$
 - E. $m \in [-1.36, -0.79]$ $b \in [-3, 1]$
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8. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-2.4, 2.6]$, $B \in [-0.4, 1.8]$, and $C \in [-2, 0]$
 - B. $A \in [1, 6]$, $B \in [2.9, 5.2]$, and $C \in [-15, -7]$
 - C. $A \in [-8, -2]$, $B \in [-5.8, -4.3]$, and $C \in [10, 12]$
 - D. $A \in [-2.4, 2.6]$, $B \in [-4, -0.7]$, and $C \in [2, 3]$
 - E. $A \in [1, 6]$, $B \in [-5.8, -4.3]$, and $C \in [10, 12]$
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9. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-4x - 7}{8} - \frac{4x + 4}{3} = \frac{-4x + 9}{4}$$

- A. $x \in [-25.1, -22.8]$
 - B. $x \in [-3.9, -1.2]$
 - C. $x \in [-1.5, 0.2]$
 - D. $x \in [-6.2, -4.7]$
 - E. There are no real solutions.
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10. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(8, -5) \text{ and } (-7, -6)$$

- A. $m \in [0.05, 0.24]$ $b \in [-5.7, -3.4]$
 - B. $m \in [0.05, 0.24]$ $b \in [-0.7, 2.9]$
 - C. $m \in [-0.22, 0.02]$ $b \in [-7.4, -6.1]$
 - D. $m \in [0.05, 0.24]$ $b \in [3.5, 7.5]$
 - E. $m \in [0.05, 0.24]$ $b \in [-14.3, -12.7]$
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